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Quality Control / Assurance / Audit | Proof Checking (Structural Designs & Drawings)
Soil Stabilization and Shoring Services | Non - Destructive Testing

NABL ACCREDITED AS PER ISO/IEC 17025:2005

Job No.: CECTC-BBMP-MN-W.No.13-2018-19 Date: 21.02.2019

TEST REPORT

CLIENT	:	**Executive Engineer,** Dasarahalli Division, BBMP, Bangalore.
AGENCY	:	**Sri. Muniraj Naik,** Contractor, Bangalore.
NAME OF THE WORK	:	Drilling of borewell and providing water facilities in Ward No. 13, Shettyhalli Sub Division, BBMP, Bangalore.
REFERENCE	:	EE/DD/WO/341/2018-19 Dated: 21.02.2019
SAMPLE ID	:	Cement
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl. No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part -5)	145 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	350 Minutes	Not More than 600 Minutes
2	Soundness	IS-4031 (Part 3) by the Le-Chatelier method	1 mm	Not more than 10 mm
3	Standard Consistency	IS-4031 (Part -4)	29.00 %	-

Note:

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⇒ The results indicated above are based on the tests carried out on the samples received in the laboratory.

⇒ Any Query regarding the report must be reported within 15 days from the date of testing.

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Job No.: CECTC-BBMP-MN-W.No.13-2018-19 Date : 21.02.2019

TEST REPORT ON COARSE AGGREGATES
IS 383-1970 (RA- 2002)

Client : **Executive Engineer,** Dasarahalli Division, BBMP, Bangalore.

Agency : **Sri. Muniraj Naik,** Contractor, Bangalore.

Name of Work : Drilling of borewell and providing water facilities in Ward No. 13, Shettyhalli Sub Division, BBMP, Bangalore.

Reference : EE/DD/WO/341/2018-19 Dated: 21.02.2019

Date of Testing : 21.02.2019

Material : 20mm Aggregates

Total Wt. of Aggregates in gms= **5000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits
40	0	0	0	100	100
20	139	2.8	2.8	97.2	95-100
10	2878	57.6	60.3	39.7	25-55
4.75	1759	35.2	95.5	4.5	0-10

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Job No.: CECTC-BBMP-MN-W.No.13-2018-19

28.02.2019

GRADATION FOR WMM
MORTH TABLE-400-11

Client **Executive Engineer, Dasarahalli Division, BBMP, Bangalore**

Agency **Sri, Muniraju Naik, Contractor, Bangalore**

Name of Work Drilling of borewell and providing water facilities in Ward No 13 Shettyhalli Sub Division, BBMP,Bangalore.

Reference **EE/DD/WO/341/2018-19 Dated 21.02.2019**

Date of Testing 28.02.2019

Material : WMM

Sample ID : WMM Layer

Oven Dry Wt (gm): **8690**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	315	315	3.6	96.4	95-100
22.4	2675	2990	34.4	65.6	60-80
11.2	1455	4445	51.2	48.8	40-60
4.75	1215	5660	65.1	34.9	25-40
2.36	1060	6720	77.3	22.7	15-30
0.600	895	7615	87.6	12.4	8-22
0.075	715	8330	95.9	4.1	0-8

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Job No.: CECTC-BBMP-MN-W.No.13-2018-19

28.02.2019

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Executive Engineer, Dasarahalli Division, BBMP, Bangalore**
Agency	**Sri, Muniraju Naik, Contractor, Bangalore**
Name of Work	Drilling of borewell and providing water facilities in Ward No 13 Shettyhalli Sub Division, BBMP,Bangalore.
Reference	EE/DD/WO/341/2018-19 Dated 21.02.2019
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Sample ID	WMM Layer
Date of Testing	28.02.2019

Result : Flakiness Index = **12.34%**

Elongation Index = **13.87%**

Result : Combined Flakiness & Elongation index **26.21%**

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

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Job No.: CECTC-BBMP-MN-W.No.13-2018-19 Date: 04.03.2019

TEST REPORT ON CONCRETE CUBES

Client	: **Executive Engineer,** Dasarahalli Division, BBMP, Bangalore.
Agency	: **Sri. Muniraj Naik,** Contractor, Bangalore.
Name of the work	: Drilling of borewell and providing water facilities in Ward No. 13, Shettyhalli Sub Division, BBMP, Bangalore.
Reference	: EE/DD/WO/341/2018-19 Dated: 21.02.2019
Sample ID	: Cement Concrete
Size of cubes	: 150mmx150mmx150mm
Cross Sectional Area	: 22500 mm^2
Technical Reference	: IS: 516-1959 (Reaffirmed 2008)
Grade of Concrete	: M_{20}
Compressive Strength as on	: 7th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.02.2019	04.03.2019	8.115	345.2	15.34
2	25.02.2019	04.03.2019	8.182	368.7	16.39
3	25.02.2019	04.03.2019	8.269	376.9	16.75

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Job No.: CECTC-BBMP-MN-W.No.13-2018-19 Date: 25.03.2019

TEST REPORT ON CONCRETE CUBES

Client : **Executive Engineer,** Dasarahalli Division, BBMP, Bangalore.

Agency : **Sri. Muniraj Naik,** Contractor, Bangalore.

Name of the work : Drilling of borewell and providing water facilities in Ward No. 13, Shettyhalli Sub Division, BBMP, Bangalore.

Reference : EE/DD/WO/341/2018-19 Dated: 21.02.2019

Sample ID : Cement Concrete

Size of cubes : 150mmx150mmx150mm

Cross Sectional Area : 22500 mm^2

Technical Reference : IS: 516-1959 (Reaffirmed 2008)

Grade of Concrete : M_{20}

Compressive Strength as on : 28th day

Sl.No.	Date of casting	Date of testing	Weight of cube (Kg)	Failure load (KN)	Compressive strength (N/mm^2)
1	25.02.2019	25.03.2019	8.235	491.5	21.84
2	25.02.2019	25.03.2019	8.267	495.7	22.03
3	25.02.2019	25.03.2019	8.319	511.8	22.75

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